

WHAT IS CLAIMED IS:

1. A method for performing a firmware update on a device of a computer system, comprising the steps of:

- 5                    saving a firmware update application and firmware to the computer system;  
                     verifying that the firmware update application has the authority to perform the  
firmware update;  
                     encrypting validation data associated with the firmware update application and the  
firmware;  
10                   restarting the computer system;  
                     locating the firmware update application and the firmware;  
                     decrypting the validation data; and  
                     initiating the firmware update application.

- 15                   2. The method for performing a firmware update on a device of a computer system of  
claim 1, wherein the step of verifying that the firmware update application has the authority to  
perform the firmware update comprises the step of determining whether the firmware update  
application has access to a predetermined encryption key.

3. The method for performing a firmware update on a device of a computer system of claim 2, wherein the step of verifying that the firmware update application has the authority to perform the firmware update comprises the step of:

5 encrypting a token with a predetermined encryption key, the result being a first encrypted token;

providing the unencrypted token to the firmware update application;

encrypting the token at the firmware update application, the result being a second encrypted token;

10 comparing the first encrypted token and the second encrypted token; and

allowing the method for performing a firmware update to continue if the first encrypted token matches the second encrypted token;

4. The method for performing a firmware update on a device of a computer system of claim 2, wherein the predetermined encryption key is maintained by the BIOS of the computer system.

5. The method for performing a firmware update on a device of a computer system of claim 1, further comprising the steps of,

20 setting a firmware update available flag following the step of encrypting the firmware update application and the firmware image; and

initiating the firmware update application following a restart of the computer system only if it is determined that the firmware update available flag is set to true.

6. The method for performing a firmware update on a device of a computer system of claim 1, wherein the step of encrypting the validation data comprises the step of encrypting the validation data with an encryption key that includes some content derived from an administrative password associated with the computer system.

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7. The method for performing a firmware update on a device of a computer system of claim 1, wherein the step of encrypting the validation data comprises the step of encrypting the validation data with an encryption key that is comprised of a token provided by the BIOS that is appended to an administrative password associated with the computer system.

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8. The method for performing a firmware update on a device of a computer system of claim 1, wherein the firmware update application is DOS-based application.

9. A method for updating the firmware of a target device in a computer system, comprising the steps of:

providing a firmware update application and firmware update to the computer system;

verifying that the firmware update application is authorized to update the firmware

5 of the target device;

verifying that the user is authorized to update the firmware of the target device;

encrypting validation data associated with the firmware update application and the  
firmware;

resetting the computer system;

10 recognizing that a firmware update is available;

decrypting the validation data; and

replacing the existing firmware of the target device with the firmware update.

10. The method for updating the firmware of a target device in a computer system of  
15 claim 9, wherein the step of verifying that the firmware update application is authorized to update  
the firmware of the target device comprises the step of verifying that the firmware update application  
is operable to encrypt a data string according to a predetermined encryption key.

11. The method for updating the firmware of a target device in a computer system of  
20 claim 10, wherein the step of verifying that the firmware update application is authorized to perform  
the firmware update comprises the steps of,

encrypting a data string with a predetermined encryption key, with the result being  
a first encrypted file;

passing an unencrypted version of the data string to the firmware update application;

25 encrypting at the firmware update application the data string with an encryption key,  
with the result being a second encrypted file; and

comparing the first encrypted file to the second encrypted file.

12. The method for updating the firmware of a target device in a computer system of claim 9, wherein the step of verifying that the user is authorized to perform the firmware update comprises the steps of,

prompting the user for a password; and

5 verifying that the password provided by the user is a predetermined user password.

13. The method for updating the firmware of a target device in a computer system of claim 12, wherein the step of encrypting the validation data comprises the steps of,

forming a second encryption key, the encryption key having content from the user

10 password; and

encrypting the validation data with the second encryption key.

14. The method for updating the firmware of a target device in a computer system of claim 9, wherein the step of recognizing that a firmware update is available comprises the steps of,

15 setting a firmware update available flag; and

recognizing, following a reset of the computer system, that a firmware update available flag has been set to indicate that a firmware update is available.

15. The method for updating the firmware of a target device in a computer system of claim 13, wherein the step of decrypting the validation data comprises the step of decrypting the validation data with the second encryption key.

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16. A method for updating the firmware of a device of a computer system, comprising the steps of:

providing a firmware update to the computer system, the firmware update comprising a firmware update application and a firmware image;

5 verifying that the firmware update application is authorized to update the firmware of the device;

verifying that the user of the computer system is authorized to update the firmware of the device;

causing the computer system to recognize that a verified firmware update is available  
10 for the device of the computer system; and

executing the firmware update application to cause the firmware image to replace the existing firmware of the device.

17. The method for updating the firmware of a device of a computer system of claim 16,  
15 wherein the step of causing the computer system to recognize that a firmware update is available, comprises the steps of,

setting a firmware update available flag following the successful completion of the verification steps;

resetting the computer system; and

20 recognizing during the boot of the computer system that a firmware update available flag has been set.

18. The method for updating the firmware of a device of a computer system of claim 16, wherein the step of verifying that the firmware update application is authorized to update the  
25 firmware of the device comprises the step of verifying that the firmware update application has access to a predetermined encryption key.

19. The method for updating the firmware of a device of a computer system of claim 16, wherein the step of verifying that the use of the computer is authorized to update the firmware of the device comprises the step of verifying that the user enters an administrative password associated with the computer system.

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20. The method for updating the firmware of a device of a computer system of claim 16, wherein the firmware update application is a DOS-based application.

21. A computer system, comprising:

a processor;

memory;

a device driven by firmware associated with the device;

5 wherein the computer system is operable to update the firmware of the device by,

receiving a firmware update application and firmware image;

verifying that the firmware update application is authorized to update the  
firmware of the device;

10 verifying that the user of the computer system is authorized to update the  
firmware of the device;

setting a firmware update available flag if both the firmware update  
application and the user are authorized to update the firmware of the device; and

resetting the computer system;

15 executing the firmware update application to update the firmware of the  
device with the firmware image.